

REMARKS

Claims 1-27 of the subject application stand rejected under 35 U.S.C. § 102 in view of U.S. Patent No. 5,358,729 to Ohkuma et al. ("Ohkuma") and under 35 U.S.C. § 103(a) under Ohkuma in view of U.S. Patent No. 2,287,599 to Bulfer. Applicant traverses these rejections for the following reasons.

Applicant has amended claims 1, 24, 26, and 27 in the present Response.

Claims 5, 8, 11, and 17 have been canceled.

Applicant's representatives acknowledge, with appreciation, the phone interview with Examiner Paul Ward and Supervisory Patent Examiner James Wilson on October 13, 2005. Although Applicant disagrees with the rejections set forth by the Examiner for the reasons set forth in the interview and on the record, the claims have been amended as set forth herein in the interest of expediency and to pursue particular embodiments of the invention. Applicant expressly reserves the right to pursue the original claims in a continuation application at a later date.

A. Rejection of claims 1-27 under 35 U.S.C. § 102

In the October 13, 2005 interview, Supervisory Examiner Wilson indicated that Applicant's arguments were sufficient to rebut anticipation by the Ohkuma reference. Specifically, Applicant respectfully asserted and maintains that Ohkuma does not disclose acidifying unmodified starch to a pH wherein the pH is optimum to convert the unmodified starch to resistant starch when at the reaction temperature, and maintaining

the whiteness level between the recited levels, for the reasons expressed in the interview and on the record.

In addition, and in order to expedite the prosecution of this matter, the claims have been amended to recite process parameters, as suggested by the Examiner. In particular, and as amended, Okhuma does not disclose converting the modified starch to resistant starch at reaction temperatures of between about 140°C to about 180°C, at a pH of about 1 to about 4, where the pH is optimum to convert the unmodified starch to a maximum yield of resistant starch when at the reaction temperature, while maintaining the whiteness level between about 60 and about 100. Okhuma provides no nexus between pH and reaction temperature, discloses only post formation pH values that are outside the claimed range, and does not disclose the claimed whiteness levels.

Accordingly, withdrawal of the rejection to claims 1-4, 6-7, 9-10, 12-16, and 18-27 under 35 U.S.C. § 102 is respectfully requested.

B. Rejection of claims 1-27 under 35 U.S.C. § 103

In the October 13, 2005 interview, Examiner Wilson asserted that Applicant's arguments regarding Ohkuma's failure to teach or suggest a nexus between an optimum pH and temperature while maintaining a whiteness level within the claimed range, as recited in the claims of the subject application, would still be considered obvious under 35 U.S.C. § 103, and, instead, suggested amendments of the claims that

include numerical parameters, with remarks showing non-obviousness of the amended claims.

In the present Response, claims 1, 24, and 27 have been amended to include the numerical parameters as suggested.

Amended claims 1, 24, and 27 of the subject application recite a resistant starch and method for producing the same wherein the reaction temperature is selected in the range of about 140°C to about 180°C, the pH is selected in the range of about 1 to about 4, to produce a maximum yield while maintaining a whiteness level between about 60 and about 100. Ohkuma does not disclose the claimed method, or the specifically recited process parameters. The method of Ohkuma discloses only post formation pH values outside the claimed range and provides no nexus between pH and reaction temperature. Further, the Ohkuma process produces a starch having a whiteness of 50.5 or less at temperatures of 140°C to 180°C. (See, Table 13, column 23, lines 24-36). There is no suggestion or motivation in Ohkuma to produce a resistant starch employing the pH and reaction temperatures claimed in the present invention, while maintaining the whiteness levels between about 60 and about 100. Indeed, Ohkuma teaches away from maintaining whiteness levels of between about 60 and about 100 at the claimed temperature range. As taught by Ohkuma at column 23, lines 38-39, “[t]he whiteness decreased generally in inverse proportion to the heating temperature or heating time.” Therefore, one of skill in the art reading Ohkuma would not be motivated to maintain the whiteness levels between about 60 and about 100 at a reaction temperature of about 140°C to about 180°C, while at an optimum pH of about 1 to about 4.

Further, nothing in U.S. Patent No 2,287,599 to Bulfer when combined with Okhuma would render obvious claims 1-27. The Examiner only cites Bulfer for the limited purpose of disclosing a particular whiteness level at a specific pH and reaction temperature. As agreed in the October 23, 2005 interview, Bulfer does not disclose a whiteness level of 80-90%, but rather is referring to a solubles content within this range.

Accordingly, withdrawal of the rejection of claims 1-4, 6-7, 9-10, 12-16, and 18-27 under 35 U.S.C. § 103 is respectfully requested.

CONCLUSION

Applicant submits that claims 1-4, 6-7, 9-10, 12-16, and 18-27 of the subject application recite a novel and non-obvious resistant starch and method of producing same. In view of the foregoing, Applicant respectfully submits that the subject application is in condition for allowance. Accordingly, reconsideration of the rejections and notice of allowance for claims 1-4, 6-7, 9-10, 12-16, and 18-27 at an early date are earnestly solicited.

If the undersigned can be of assistance to the Examiner, the Examiner is invited to contact the undersigned at the number set forth below.

Respectfully submitted,



Joseph L. Kent
Registration No. 54,216

Kirkpatrick & Lockhart Nicholson Graham LLP
Henry W. Oliver Building
535 Smithfield Street
Pittsburgh, PA 15222-2312
Telephone: (412) 355-8315
Facsimile: (412) 355-6501

Customer No. 41,835